Figure 1A

Identity to SeqID No:1 is indicated by a dot, while a dash (-) indicates a nonexistent nucleotide.

Seqid1 Seqid3	:	* 20 * 40 * ATGAAAACAACCGACAAACGGACAACCGAAACCCGCAAAGCCCCGAA	:	50 50
Seqid1 Seqid3	:	60 * 80 * 100 AACCGGTCGCATCCGCCTTCTCGCCTGCTTACTTAGCCATATGCCTGTCGTC		100 100
Seqid1 Seqid3	:	* 120 * 140 * TCGGCATTCTTCCCCAAGCCTGGGCGGGACACACTTATTTCGGCATCAAC	:	150 150
Seqid1 Seqid3	:	160 * 180 * 200 TACCAATACTATCGCGACTTTGCCGAAAATAAAGGCAAGTTTGCAGTCGG		200 200
Seqid1 Seqid3	:	* 220 * 240 * GGCGAAAGATATTGAGGTTTACAACAAAAAAGGGGAGTTGGTCGGCAAAT		250 250
Seqid1 Seqid3	:	260 * 280 * 300 CAATGACAAAAGCCCCGATGATTGATTTTTCTGTGGTGTCGCGTAACGGC		300 300
Seqid1 Seqid3	:	* 320 * 340 * GTGGCGGCATTGGTGGGCGATCAATATTGTGAGCGTGGCACATAACGG		350 350

Figure 1B

		360 * 380 *	400		
		CGGCTATAACAACGTTGATTTTGGTGCGGAGGGAAGCAATG		:	400
pedias	•		A .	•	400
		* 420 * 440	*		
		ACCGTTTTTCTTATCAAATTGTGAAAAGAAATAATTATAA .TAA.		:	450 450
seqras	•	.1AA	• • • • • • • • •	:	450
		460 * 480 *	500		
		AACGGTCATCCTTATGGTGGCGATTATCATATGCCGCGTT'AC		:	500 500
seqras	•		• • • • • • • • • •	•	500
		* 520 * 540			
		TGTAACCGATGCAGAACCTGTTGAAATGACCAGTTATATG			550 550
204740	Ī			•	
		560 * 580 *	600		
		AATATATCGATCAAAATAATTACCCTGACCGTGTTCGTAT		:	600
504145	•		• • • • • • • • • •	•	000
		* 620 * 640			
_		AGGCAATATTGGCGATCTGATGAAGATGAGCCCAATAACC		:	650 650
beqias	•			•	050
		660 * 680 *	700		
-		ATATCATATTGCAAGTGCGTATTCTTGGCTCGTTGGTGGC.		:	700
504145	•		• • • • • • • • •	•	, 00
		* 720 * 740			
-		CACAAAATGGATCAGGTGGTGGCACAGTCAACTTAGGTAG	-	:	750 750
seding	:			:	/50

Figure 1C

Seqid1	:	AAACATAGCCCATATGGTTTTTACCAACAGGAGGCTCATTTGGCGACAG :	800 800
		* 820 * 840 * TGGCTCACCAATGTTTATCTATGATGCCCAAAAGCAAAAGTGGTTAATTA :	850 850
		860 * 880 * 900 ATGGGGTATTGCAAACGGGCAACCCCTATATAGGAAAAAGCAATGGCTTC:	900 900
Seqid1 Seqid3	:	* 920 * 940 * CAGCTGGTTCGTAAAGATTCGTTCTATGATGAAATCTTTGCTGGAGATAC :	950 950
Seqid1 Seqid3	:	960 * 980 * 1000 CCATTCAGTATTCTACGAACCACATCAAAATGGGAAATACACTTTTCACG:	1000
Seqidl Seqid3	:	* 1020 * 1040 * ACAATAATAATGGCACAGGAAAAATCAATGCCAAACATGAACACAATTCT:G: 1	1050
Seqid1 Seqid3	:	1060 * 1080 * 1100 CTGCCTAATAGATTAAAAACACGAACCGTTCAATTGTTTAATGTTTCTTT : : 1	1100 100
Seqid1 Seqid3	:	* 1120 * 1140 * ATCCGAGACAGCAAGAGAACCTGTTTATCATGCTGCAGGTGGTGTCAACA :	1150 150

Figure 1D

		GTTATCGACCCAGACTGAATAATGGAGAAAATATTTCCTTTATTGACGAA	: 1200
Seqidl Seqid3	:	* 1220 * 1240 * GGAAAAGGCGAATTGATACTTACCAGCAACATCAATCAAGGTGCTGGAGG:	: 1250
Seqidl Seqid3	:	1260 * 1280 * 1300 ATTATATTTCCAAGGAGATTTTACGGTCTCGCCTGAAAATAACGAAACGT :	: 1300
	:	* 1320 * 1340 * GGCAAGGTGCGGGCGTTCATATCAGTGAAGACAGTACCGTTACTTGGAAA:	: 1350
		1360 * 1380 * 1400 GTAAACGGCGTGGCAAACGACCGCCTGTCCAAAATCGGCAAAGGCACGCT:	: 1400
Seqid1 Seqid3	:	* 1420 * 1440 * GCACGTTCAAGCCAAAGGGGAAAACCAAGGCTCGATCAGCGTGGGCGACG:	: 1450
Seqid1 Seqid3	:	1460 * 1480 * 1500 GTAAAGTTATTTTAGATCAACAAGCAGATGAAAATAATAAAAAACAAGCCCCGGGCTAGGC : 1500	: 1500
		* 1520 * 1540 * TTTAGTGAAATCGGCTTGGTCAGCGGCAGGGGTACGGTGCAACTGAATGC:	: 1550

Figure 1E

Seqid1	:	CGATAATCAGTTCAACCCCGACAAACTCTATTTCGGCTTTCGCGGCGGAC : 1600
		* 1620 * 1640 * GTTTGGATTTGAACGGGCATTCGCTTTCGTTCCACCGTATTCAAAATACC : 1650
Seqid1 Seqid3	:	1660 * 1680 * 1700 GATGAAGGGGCGATGATTGTCAACCACAATCAAGACAAAGAATCCACCGT : 1700 : 1700
		* 1720 * 1740 * TACCATTACAGGCAATAAAGATATTGCTACAACCGGCAATAACAACAGCT : 1750
Seqidl Seqid3	:	1760 * 1780 * 1800 TGGATAGCAAAAAGAAATTGCCTACAACGGTTGGTTTGGCGAGAAAGAT : 1800
Seqid1 Seqid3	:	* 1820 * 1840 * ACGACCAAAACGAACGGGCGCTCAACCTTGTTTACCAGCCCGCCGCAGA : 1850
Seqid1 Seqid3	:	1860 * 1880 * 1900 AGACCGCACCCTGCTTTCCGGCGGAACAAATTTAAACGGTAACATCA : 1900
		* 1920 * 1940 * CGCAAACAAACGGCAAACTGTTTTTCAGCGGCAGACCGACACCGCACGCC : 1950

Figure 1F

Seqid1 Seqid3	:	TACAATCATTTAGGAAGCGGTTGGTCAAAAATGGAAGGTATCCCACAAGG : 2000AACGA.CATGCAAGCTGC : 2000
		* 2020 * 2040 * AGAAATCGTGTGGGACAACGACTGGATCAACCGCACGTTTAAAGCGGAAA : 2050
		2060 * 2080 * 2100 ATTTCCATATTCAGGGCGGGCAGGCGGTGATTTCCCGCAATGTTGCCAAA : 2100 .CAA.A
	:	* 2120 * 2140 * GTGGAAGGCGATTGGCATTTGAGCAATCACGCCCAAGCAGTTTTTGGTGT : 2150
Seqid1 Seqid3	:	2160 * 2180 * 2200 CGCACCGCATCAAAGCCACAATCTGTACACGTTCGGACTGGACGGGTC : 2200 : 2200
	:	* 2220 * 2240 * TGACAAATTGTGTCGAAAAAACCATTACCGACGATAAAGTGATTGCTTCA : 2250 : 2250
		2260 * 2280 * 2300 TTGACTAAGACCGACATCAGCGGCAATGTCAGCCTTGCCGATCACGCTCA : 2300
Seqid1 Seqid3	:	* 2320 * 2340 * TTTAAATCTCACAGGGCTTGCCACACTCAACGGCAATCTTAGTGCAAATG : 2350 : 2350

Figure 1G

		2360 * 2380 * 2400 GCGATACACGTTATACAGTCAGCCACAAACGCCACCCAAAACGGCGACCTT : 24	100
		* 2420 * 2440 * AGCCTCGTGGGCAATGCCCAAGCAACATTTAATCAAGCCACATTAAACGG : 2450	
		2460 * 2480 * 2500 CAACACATCGGCTTCGGGCAATGCTTCATTTAATCTAAGCAACAACGCCG : 25	500
		* 2520 * 2540 * TACAAAACGGCAGCTTTCCGGCAACGCTAAGGCAAACGTAAGC : 2550	
Seqid1 Seqid3	:	2560 * 2580 * 2600 CATTCCGCACTCAACGGTAATGTCTCCCTAGCCGATAAGGCAGTATTCCA : 2600	500)
Seqid1 Seqid3	:	* 2620 * 2640 * TTTTGAAAGCAGCCGCTTTACCGGACAAATCAGCGGCAGCAAGGATACGG : 2650	550
		2660 * 2680 * 2700 CATTACACTTAAAAGACAGCGAATGGACGCTGCCGTCAGGCACGGAATTA : 27	
		* 2720 * 2740 * GGCAATTTAAACCTTGACAACGCCACCATTACACTCAATTCCGCCTATCG : 2750	

Figure 1H

Seqid1	:	2760 * 2780 * 2800 CCACGATGCGGCAGGGGCGCAAACCGGCAGTGCGACAGATGCGCCGCGC- : 2799
Seqid1 Seqid3	:	* 2820 * 2840 *CGCCGTTCGCGCCGTTCCCTATTATCCGTTACACCTCCGGCT : 2841 GCCGTTCG
Seqid1 Seqid3	:	2860 * 2880 * 2900 TCGGCAGAATCCCATTTCAACACGCTGACGGTAAACGGCAAATTGAACGG : 2891TG : 2900
		* 2920 * 2940 * TCAGGGAACATTCCGCTTTATGTCGGAACTCTTCGGCTACCGAAGCGACA : 2941 : 2950
Seqid1 Seqid3	:	2960 * 2980 * 3000 AATTGAAGCTGGCGGAAAGTTCCGAAGGCACTTACACCTTGGCGGTCAAC : 2991
Seqid1 Seqid3	:	* 3020 * 3040 * AATACCGGCAACGAACCCGTAAGCCTCGATCAATTGACGGTAGTGGAAGG : 3041
Seqid1 Seqid3	:	3060 * 3080 * 3100 GAAAGACAAACCGCTGTCCGAAAACCTTAATTTCACCCTGCAAAACG : 3091 A
		* 3120 * 3140 * AACACGTCGATGCCGGCGCGTGGCGTTACCAACTCATCCGCAAAGACGGC : 3141 : 3150

Figure 1I

Seqid1	:	3160 * 3180 * 3200 GAGTTCCGCCTGCATAATCCGGTCAAAGAACAAGAGCTTTCCGACAAACT : 31 : 3200	
Seqid1 Seqid3	:	* 3220 * 3240 * CGGCAAGGCCAAAAAACAGGCGGGAAAAGACACGCGCAAAGCC : 32	41
Seqid1 Seqid3	:	3260 * 3280 * 3300 TTGACGCGCTGATTGCGGCCGGGCGGTGCCGTCGAAAAGACAGAAAGC : 32 : 3300	91
		* 3320 * 3340 * GTTGCCGAACCGGCCGGCAGGCAGGCAGGCAGAAATGTCGGCATTATGCA : 33 : 3350	
Seqid1 Seqid3	:	3360 * 3380 * 3400 GGCGGAGGAAAAAAACGGGTGCAGGCGGATAAAGACACCGCCTTGG : 33 : 3400	91
		* 3420 * 3440 * CGAAACAGCGCGAAGGGAAAACCCGGCCGCCTTCCCCCGC : 34	41
Seqid1 Seqid3	:	3460 * 3480 * 3500 GCCCGCCGCGCCGCGGGATTTGCCGCAACCGCAACCGCAACC : 34	91
Seqid1 Seqid3	:	* 3520 * 3540 * CCAACCGCAGCGGACCTGATCAGCCGTTATGCCAATAGCGGTTTGAGTG : 3550	41

Figure 1J

	CGAATTAGAC	CGTACAGGAC	GCGTTTTCGC	ACGCTCAACA	3560 AATTTTCCGCC.	:	Seqid1
		STTTGGACAAG		CGAAGACCG	CGCGTATTTGC		
	CGCCAACAAA		GCAAGATTT		3660 GGACACCAAAC		
: 3741	CGGGCGCGTC	CCTCGGCAGC		CAAATCGGT	* CCGACCTGCGC		
: 3791 3800	ACGACGGCAT	* AACACCTTCG#	CCGGACCGAA	* TTCGCACAA(3760 GGCATCCTGTT	:	Seqid1 Seqid3
	CAATACGGCA		CCACGGCGC	CACGGCTTG	* CGGCAACTCGG		
: 3891	TAGCAGCGGC	* GCGCGGGTTTT	ATCAGCACGG(* GACATCGGC	3860 TCGGCAGGTTC AT	:	Seqid1 Seqid3
: 3941)	* TGCTGCATTA	CGCCGCCGCGT	* \AGCAAAATC(CGACATCGG	* AGTCTTTCAGAC	:	Seqid1 Seqid3

Figure 1K

		3960 CGGCATTCAGGCA		CGGTTTCGG		CGAAC	
		CGCACATCGGCGC	AACGCGCTATT	TCGTCCAAA		CGCTAC	: 4041
Seqid1 Seqid3	:	4060 GAAAACGTCAATA	TCGCCACCCC	GGCCTTGCG	TTCAACCGCTAC	CCGCGC	: 4091 .00
		GGGCATTAAGGCA	GATTATTCATT	CAAACCGGC		CCATCA	: 4141
Seqid1 Seqid3	:	4160 CGCCTTATTTGAC	SCCTGTCCTATA	CCGATGCCG	CTTCGGGCAAAG	STCCGA	: 4191 4200
		ACGCGCGTCAATA	CCGCCGTATTG	GCTCAGGAT		CCGCAG	: 4241
Seqidl Seqid3	:	4260 TGCGGAATGGGG	GTAAACGCCGA	AATCAAAGG	* TTTCACGCTGT(CCCTCC	: 4291
		* ACGCTGCCGCCGC	CAAAGGCCCGC		CGCAACACAGC	GCGGGC	: 4341

Figure 1L

		4360 *	
Seqid1	:	ATCAAATTAGGCTACCGCTGGTAA : 4365	
Seqid3	:	: 4374	

Figure 2A

Identity to SeqID No:2 is indicated by a dot, while a dash (-) indicates a nonexistent amino acid.

Seqid2 Seqid4	:	* 20 * 40 * MKTTDKRTTETHRKAPKTGRIRFSPAYLAICLSFGILPQAWAGHTYFGIN	1	:	50 50
Seqid2 Seqid4	:	60 * 80 * 100 YQYYRDFAENKGKFAVGAKDIEVYNKKGELVGKSMTKAPMIDFSVVSRNO		:	100 100
Seqid2 Seqid4	:	* 120 * 140 * VAALVGDQYIVSVAHNGGYNNVDFGAEGSNPDQHRFSYQIVKRNNYKAG		:	150 150
Seqid2 Seqid4	:	160 * 180 * 200 NGHPYGGDYHMPRLHKFVTDAEPVEMTSYMDGRKYIDQNNYPDRVRIGAG K	_	:	200 200
Seqid2 Seqid4	:	* 220 * 240 RQYWRSDEDEPNNRESSYHIASAYSWLVGGNTFAQNGSGGGTVNLGSEK		:	250 250
Seqid2 Seqid4	:	260 * 280 * 300 KHSPYGFLPTGGSFGDSGSPMFIYDAQKQKWLINGVLQTGNPYIGKSNG	_	:	300 300
Seqid2 Seqid4	:	* 320 * 340 QLVRKDWFYDEIFAGDTHSVFYEPHQNGKYTFHDNNNGTGKINAKHEHN:		:	350 350

Figure 2B

: 400 400	GENISFIDE		AREPVYHAAG		360 LPNRLKTRTVÇ		
: 450 450	* SEDSTVTWK	VETWQGAGVH:	* QGDFTVSPENI	NQGAGGLYF	GKGELILTSNI	:	Seqid2 Seqid4
	QADEŇNKKQA	/GDGKVILDQ	AKGENQGSIS		460 VNGVANDRLSE		
		RGGRLDLNGH:		STVQLNADNQI	FSEIGLVSGRO		
: 600 600	AYNGWFGEKD	NSLDSKKEI	GNKDIATTGN		560 DEGAMIVNHNO		
		GNITQTNGKL		/YQPAAEDRT1	* TTKTNGRLNL	:	
: 700	QAVISRNVAK	KAENFHIQGG	WDNDWINRTF:	* MEGIPQGEIV .R	660 YNHLGSGWSKI NDHQK	:	Seqid2 Seqid4
: 750 750		WTGLTNCVEK	QSHTICTRSD		* VEGDWHLSNH		

Figure 2C

Seqid2 Seqid4	:	760 * 780 * 800 LTKTDISGNVSLADHAHLNLTGLATLNGNLSANGDTRYTVSHNATQNGDL: 800
Seqid2 Seqid4	:	* 820 * 840 * SLVGNAQATFNQATLNGNTSASGNASFNLSNNAVQNGSLTLSGNAKANVS: 850
		860 * 880 * 900 HSALNGNVSLADKAVFHFESSRFTGQISGSKDTALHLKDSEWTLPSGTEL: 900
		* 920 * 940 * GNLNLDNATITLNSAYRHDAAGAQTGSATDAPRRRSRRSLLSVTPPA : 947
		960 * 980 * 1000 SAESHFNTLTVNGKLNGQGTFRFMSELFGYRSDKLKLAESSEGTYTLAVN : 997 .V.R : 1000
		* 1020 * 1040 * NTGNEPVSLDQLTVVEGKDNKPLSENLNFTLQNEHVDAGAWRYQLIRKDG : 1047A.E : 1050
		1060 * 1080 * 1100 EFRLHNPVKEQELSDKLGKAEAKKQAGKDNAQSLDALIAAGRDAVEKTES: 1097: 1100
		* 1120 * 1140 * VAEPARQAGGENVGIMQAEEEKKRVQADKDTALAKQREGKTRPATTAFPR : 1147

Figure 2D

		1160 * 1180 * 1200 ARRARRDLPQPQPQPQPQRDLISRYANSGLSEFSATLNSVFAVQDELD : 1197
		* 1220 * 1240 * RVFAEDRRNAVWTSGIRDTKHYRSQDFRAYRQQTDLRQIGMQKNLGSGRV : 1247 E : 1250
		1260 * 1280 * 1300 GILFSHNRTENTFDDGIGNSARLAHGAVFGQYGIGRFDIGISTGAGFSSG : 129'
Seqid2 Seqid4	:	* 1320 * 1340 * SLSDDIGSKIRRRVLHYGIQARYRAGFGGFGIEPHIGATRYFVQKADYRY : 134'GG : 1350
Seqid2 Seqid4	:	1360 * 1380 * 1400 ENVNIATPGLAFNRYRAGIKADYSFKPAQHISITPYLSLSYTDAASGKVR : 139°
		* 1420 * 1440 * TRVNTAVLAQDFGKTRSAEWGVNAEIKGFTLSLHAAAAKGPQLEAQHSAG : 144'
		IKLGYRW : 1454 : 1457

Figure 3

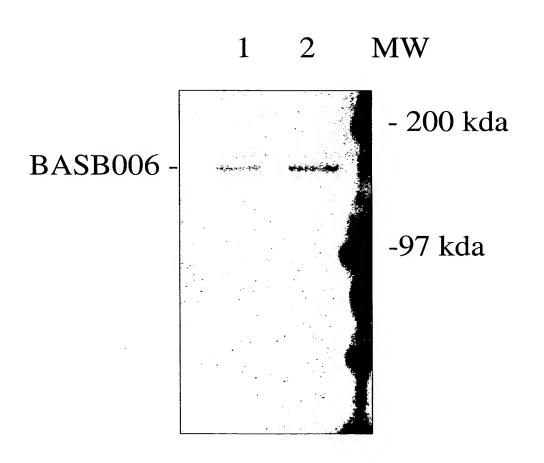
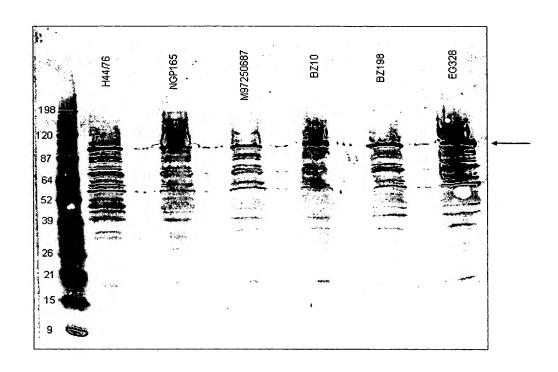


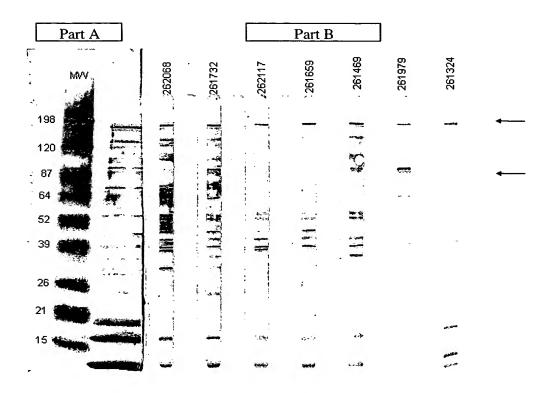
Figure 4



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Figure 5

Anti-BASB006 antibodies in human convalescent sera (part B) and in immunized mice (part



A).

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